

1<sup>st</sup> subject than the name of courses -  
pending professor should be display and  
so on display the entire list.

## TIS Excel

- \* TIS Excel is one of the feature of TIS office. It is a software that is mainly used for calculation, graphs, charts, preparing statistical reports, what-if-analysis, scenario manager etc.
- \* Some of the key features of excel includes inbuilt formulas, functions, future, forecasting budgeting etc.
- \* Components of excel.
  - ① Workbook: A workbook is a collection of worksheets. It is also called spreadsheet.
  - ② Worksheet: A worksheet is a combination of rows and columns for entering data in a synchronized manner.



Rows are denoted by alphabets whereas columns are denoted by numbers combination of a row and column that contains a single entity is called cell. A worksheet contains 1048,576 rows and 16384 columns. The default extension of an excel 5 is .XLSX

③ Cell address: Cell address is the specific location of the cell that contains the data in a worksheet.

Example: ① Cell address C7 means function of column C and row 7 in a worksheet.

② Sheet 1 / B5 means: Sheet 1 having column B and row 5 in a workbook. It is also called external address.

The menus available in excel are home, insert, data, formula, review, view etc.

④ Shortcut keys in excel.

- Ctrl + N (to create a new workbook)
- Ctrl + O (to create/open an existing workbook)
- Ctrl + S (to save a workbook on a spreadsheet)
- Ctrl + W (to close current workbook)



- Ctrl + F4 (to close the application (excel))  
or
- (It is also used to shut-down the PC)
- Ctrl + Pg down (to move to the next sheet)
- Ctrl + Pg up (to move to the previous sheet)
- Ctrl + A (to go to the data tab.)
- Alt + W (to go to the view tab.)
- Ctrl + X (move selected cells)
- Ctrl + C (Copy selected cells)
- Ctrl + V (paste content at the insertion point)
- Ctrl + Alt + V (to open paste special dialogue box).
- Ctrl + A (hide rows)
- Shift + Ctrl + a (to unhide rows)
- Ctrl + O (to hide columns)
- Shift + Ctrl + O (to unhide columns)
- Shift + Spacebar (highlight rows)
- Ctrl + Spacebar (highlight columns)
- Ctrl + G (to go to a specific cell)
- Ctrl + home key (to back to the top of the data set)
- Ctrl + End key (to go to the end of the data).
- Ctrl + Shift + L (To add filter)
- Ctrl + T (to activate design tab)

\* Different types of Operators available in excel under formula tab.



- ① Arithmetic operator (+, -, \*,  $\div$ , %)
- ② Relational operator (>, <, >=, <=, =, <math>\neq</math>)
- ③ Logical operator (Not, or, and, xor)
  - Boolean operator
  - Statistical operator
  - Exponential operator
  - Engineering operator
  - Trigonometrical operator {to combine two}
- ④ Text operator (&) - {text or values}
- ⑤ Reference operator (:, :)
- ⑥ {to select or specify range}
- ⑦ {to combine a range}

### Cell Reference

A	B	C	D	E
Roll no.	Name	M <sub>1</sub>	M <sub>2</sub>	Total
1	R <sub>1</sub>	30	35	C <sub>2</sub> +D <sub>2</sub>
2	R <sub>2</sub>	40	39	
3	R <sub>3</sub>	29	30	
4	R <sub>4</sub>	45	40	
5	R <sub>5</sub>	40	35	

### Relative Reference

R<sub>2</sub>

R<sub>3</sub>

R<sub>4</sub>

R<sub>5</sub>

R<sub>6</sub>



## Absolute Reference

b B2

- \* It refers to the cell address that will be returned while using formula. A formula is constructed using cell address. The cell address has to be accurate for the formula to be correct. broadly there are two types of cell references. a Absolute cell reference b Relative cell reference.

### \* Definition of Absolute Cell reference:

- Whenever a formula is copied from one point part of the worksheet to other, the absolute address may not change b it will remain as it is irrespective of where it is copied in absolute cell reference we use \$ dollar sign.

### \* Definition of Relative Cell reference:

- When a formula is copied from one part of the worksheet to another the relative reference of the cell will change. The ability to adjust a formula from one location to another is called relative referencing.